GateKeeper® GPU 200 4R Gas Purifiers

Superior purity control

Entegris' GateKeeper® GPU gas purifiers were designed to improve purity consistency, lifetime and final purity. Leveraging its expertise in material science, Entegris has developed a new generation of purification products that deliver unsurpassed value and performance. The model 200 is designed for peak flow rates up to 20 slpm.

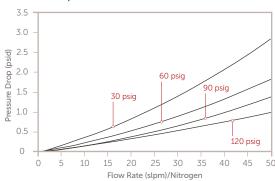


Process control and protection	Purity control to ppt levels	
ana protocuon	Low pressure drop across the purifier	
	CE certified to the Pressure Equipment Directive (PED) and manufactured in an ISO® 9001:2000 facility	
Cost effective	Regenerable – eliminates disposal issues and costs	
	Long lifetime – improved cost of ownership	
Safe and simple to use	Use ambient temperature purification – no heat or power required to operate	
	Insensitive to orientation (horizontal/vertical)	



PERFORMANCE DATA

Pressure Drop vs. Gas Flow Rate*



*The flow rate displayed on this graph may exceed maximum flow rate specification of the purifier model referenced in this data sheet. Please refer to maximum flow rate in the specifications section of this data sheet.

Note: Pressure drop may vary depending on media type.

SPECIFICATIONS

Materials of construction (housing)	316L stainless steel, electropolished
Particle filtration type	Wafergard® – 316L stainless steel membrane
Particle retention	Up to 6 LRV* for particles larger than 0.003 μm
Filtration removal rating	≥0.003 µm
Operating temperature	0-65°C (32-149°F)
Fitting size and type	½" gasket seal**
Fitting configuration	Male-to-male
Operating pressure	1.01 barg – 55.1 barg (0 psig – 800 psig)
Maximum flow rate	20 slpm
Leak rating	1×10^{-9} atm cc/sec
Dimensions	157 mm (6.2") L × Ø51 mm (2")
Approximate weight	0.7 kg (1.5 lb)

^{*}Referenced as most penetration particle size.

^{**}Also referred to as VCR® or face seal.

AVAILABLE MEDIA

Media	Gases purified	Contaminants removed	Outlet purity	Nominal flow rate ³
НХ	H ₂ , N ₂ , Noble gases, H ₂ /N ₂ , H ₂ /Noble gases	H ₂ O, O ₂ , CO, CO ₂	<100 ppt in H_2 and N_2	8.5 slpm
IX	N ₂ , Noble gases	H ₂ O, O ₂ , CO, CO ₂ , H ₂		4.3 slpm
Freon ¹ 13, 14, 23, 41, 116, 218		H ₂ O, O ₂	<100 ppt in Ar and N ₂	
NX O ₂	O ₂	CO ₂	<1 ppb	10.6 slpm
		H ₂ O	<1 ppb	
OP CDA, N ₂ , Noble gases	CDA, N₂, Noble gases	H ₂ O	<100 ppt in N ₂	9 slpm
		Condensable organics (as Toluene)	<1 ppt	
		Non-condensable organics ² (as Butane)	<5 ppt	
		Refractory compounds (as HMDSO)	<1 ppt	
		Volatile acids (as SO ₂)	<1 ppt	
		Volatile bases (as NH ₃)	<10 ppt	
SX	NH ₃	H ₂ O	<2 ppb in NH ₃	3.5 slpm
		CO ₂	<1 ppb	
		O ₂	<1 ppb	
		Hydrocarbons	<1 ppt	
	CDA, N ₂ , Noble gases, CO ₂ , NH ₃	Condensable organics (as Toluene)	<1 ppt	12 slpm⁴
		Non-condensable organics ² (as Butane)	<5 ppt	
		Refractory compounds (as HMDSO)	<1 ppt	
WX	CDA, H ₂ , N ₂ , Noble gases, CO ₂ , NH ₃ , AsH ₄ , PH ₄ , GeH ₄ , SiH ₄	H ₂ O	<100 ppt in N ₂	35 slpm⁵

¹ Removal of H₂O and O₂ only.

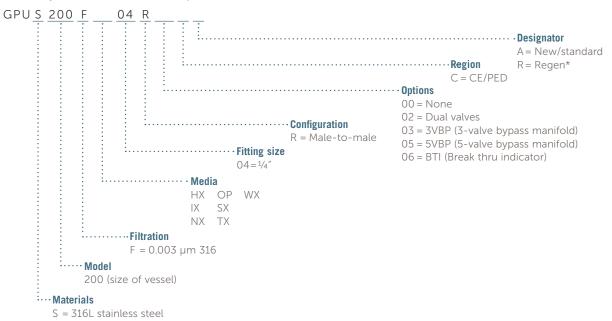
² Consult Entegris with specific non-condensable contaminants.

³ With a 1 ppm H₂O impurity inlet challenge ⁴ With a 1 ppm Toluene impurity inlet challenge over 1 year

⁵ Lifetime will exceed 1 year at its maximum flow rate

ORDERING INFORMATION

GateKeeper 200 4R Gas Purifiers: part number



^{*}Contact Entegris to determine if the purifier is designed for regeneration.

FOR MORE INFORMATION

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit **entegris.com** and select the Contact Us link to find the customer service center nearest you.

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Corporate Headquarters 129 Concord Road Billerica, MA 01821 USA Customer Service
Tel +1 952 556 4181
Fax +1 952 556 8022
Toll Free 800 394 4083

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